Claims

1. A method for generating an antibody against a lipid raft target associated with a type of PrP^{Sc} cells, comprising:
    a. isolating said lipid rafts from said type of PrP^{Sc} cells; and
    b. immunizing an animal host by said isolated lipid rafts.
2. The method according to claim 1, wherein said type of PrP^{Sc} cells are either PrP^{Sc} sensitive cells or PrP^{Sc} resistant cells.
3. The method according to claims 1 or 2 further comprising:
    c. producing hybridomas from the immunized animal host, wherein said hybridomas produce monoclonal antibodies;
    d. selecting said monoclonal antibodies; and
    e. purifying said selected monoclonal antibodies.
4. A method according to claim 3, wherein said selecting further comprises selecting monoclonal antibodies that modulate conversion of PrP^{C} into PrP^{Sc} of said type of PrP^{Sc} sensitive cells.
5. A method according to any of claims 2 to 4, wherein said type of PrP^{Sc} sensitive cells are neuroblastoma cells.
6. A method according to claim 5, wherein said type of neuroblastoma cells are scN2a or N2A cells.
7. A method of identifying a lipid raft target comprising identifying an antigen that binds to the selected antibodies according to claim 3, wherein said identifying comprises identifying a partial or full amino acid or nucleic acid of said antigen.
8. A hybridoma produced by the method according to any of claims 3 to 6.
9. The hybridoma clone designated #51 deposited at the ECACC under Provisional Accession No. 05021601.
10. The hybridoma clone designated #57 deposited at the ECACC under Provisional Accession No. 05030901.
11. The hybridoma clone designated #245 deposited at the ECACC under Provisional Accession No. 05021603.
12. An antibody or fragment thereof generated by said hybridoma according to claim 8.
13. The monoclonal antibody generated by hybridoma clone designated #51 deposited at the ECACC under Provisional Accession No. 05021601 according to claim 9.

14. The monoclonal antibody generated by hybridoma clone designated #57 deposited at the ECACC under Provisional Accession No. 05030901 according to claim 10.
15. The monoclonal antibody generated by hybridoma clone designated #245 deposited at the ECACC under Provisional Accession No. 05021603 according to claim 11.
16. An antigen or a specific portion thereof that binds to the antibody or a fragment thereof according to claim 12.
17. An antigen or a specific portion thereof that binds to the antibody or a fragment thereof according to any of claims 13 to 15.
18. An antibody, monoclonal antibody, chimeric antibody, fully humanized antibody, anti-anti-ID antibody or fragment thereof being capable of specifically binding said antigen or a specific portion thereof according to any of claims 16 or 17.
19. A pharmaceutical composition comprising a pharmaceutically acceptable carrier and the antibody or a fragment thereof according to any of claims 12 to 15 or 18.
20. The pharmaceutical composition of claim 19, wherein said antibody or antibody fragment is further capable of regulating a biochemical activity of said antigen or a specific portion thereof according to any of claims 16 or 17.
21. The use of an antibody or antibody fragment according to any of claims 12 to 15 or 18 being capable of specifically binding said antigen or a specific portion thereof according to claims 16 or 17 in the manufacture of a medicament for the treatment of a disease caused or aggravated by the activity of said antigen or a specific portion thereof.
22. The use according to claim 21, wherein said disease is a conformational disease.
23. The use according to claim 21 or 22, wherein said conformational disease is a prion disease, Alzheimer's Disease, amyotrophic lateral sclerosis (ALS), Pick's disease, Parkinson's disease, Frontotemporal dementia, Diabetes Type II, Multiple myeloma, Plasma cell dyscrasias, Familial amyloidotic polyneuropathy, Medullary carcinoma of thyroid, Chronic renal failure, Congestive heart failure, Senile cardiac and systemic amyloidosis, Chronic inflammation, Atherosclerosis, Familial amyloidosis Gelsolin and Huntington's disease, cerebral amyloid angiopathy (CAA).

24. A method of determining PrP^{Sc} infection in a dead animal, comprising: extracting tissue from an animal that has died; contactin g the tissue with an antibody or a fragment thereof according to any of the preceding claims, wherein the monoclonal antibody, antibody or a fragment thereof binds to said antigen or a specific portion thereof according to claims 16 or 17 specific to the animal that has died; and determining if the antibody has bound to said antigen or a specific portion thereof; wherein presence of said antigen or a specific portion thereof in the tissue is indicative of PrP^{Sc} infection.
25. Use of said antibody or a specific fragment thereof according to any of claims 12 to 15 or 18 for the preparation of a pharmaceutical formulation for the treatment of a conformational disease.
26. A method for the detection of PrP^{Sc} within a sample, which assay comprises (i) contacting said sample with said antigen or a specific portion thereof according to claims 16 or 17 or said monoclonal antibody, antibody or fragment thereof according to claims 12 to 15 or 18; (ii) contacting sample obtained in (i) with PrP^{C} or PrP^{C} containing mixtures; and (iii) determining the presence and/or amount of PrP^{Sc} in said sample.
27. A method for identifying a compound which modulates the transition of PrP^{C} into PrP^{Sc} comprising: (i) contacting said sample with said antigen or a specific portion thereof according to claims 16 or 17, or with said antibody or fragment thereof according to any of claims 12 to 15 or 18 and at least another conversion factor (e.g. Apolipoprotein B or a fragment thereof) (a) in the presence of said modulatory compound and (b) in the absence of said compound; (ii) contacting the mixtures obtained in step (i) a and (i) b with PrP^{C} or PrP^{C} containing mixtures; and (iii) determining the amount of PrP^{Sc} (a) in the presence of said modulatory compound and (b) in the absence of said modulatory compound.